WWC Intervention Report U.S. DEPARTMENT OF EDUCATION

What Works Clearinghouse



Dropout Prevention July 16, 2007

Talent Development High Schools

Program description

Talent Development High Schools is a school reform model for restructuring large high schools with persistent attendance and discipline problems, poor student achievement, and high dropout rates. The model includes both structural and curriculum reforms. It calls for schools to reorganize into small "learning"

communities"—including ninth-grade academies for first-year students and career academies for students in upper grades—to reduce student isolation and anonymity. It also emphasizes high academic standards and provides all students with a college-preparatory academic sequence.

Research

One study of *Talent Development High Schools* met the What Works Clearinghouse (WWC) evidence standards with reservations. The quasi-experimental research design included multiple cohorts of entering ninth-grade students from 11 Philadelphia high schools—five *Talent Development High Schools* and six

matched comparison schools.¹ The WWC considers the extent of evidence for *Talent Development High Schools* to be small for progressing in school. No studies that met the WWC evidence standards with or without reservations addressed staying in school or completing school.

Effectiveness

Talent Development High Schools was found to have potentially positive effects on progressing in school.

	Staying in school	Progressing in school	Completing school
Rating of effectiveness	na	Potentially positive effects	na
Improvement index ²	na	Average: +7 percentile points Range: +6 to +8 percentile points	na

na = not applicable

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^{1.} The evidence presented in this report is based on available research. Findings and conclusions may change as new research becomes available.

[.] These numbers show the average improvement index for all findings across the study.

For more information about specific studies and WWC calculations, please see the <u>WWC Talent Development High Schools Technical Appendices</u>.

^{9.} The study did not use a comparison group to assess relevant WWC outcomes.

Appendix

Appendix A1 Study characteristics: Kemple, Herlihy, & Smith, 2005 (quasi-experimental design)

Characteristic	Description
Study citation	Kemple, J. J., Herlihy, C. M., & Smith, T.J. (2005). Making progress toward graduation: Evidence from the Talent Development High School model. New York: MDRC.
Participants	The main analysis sample included first-time ninth-grade students ¹ from five high schools that began implementing <i>Talent Development High Schools</i> between 1999 and 2001 and six matched comparison high schools. ² Between two and four comparison schools were matched to each of the five intervention schools based on the racial/ethnic composition and promotion rates of the schools' ninth-grade students (Kemple & Herlihy, 2004). A comparison school could be matched to multiple <i>Talent Development High Schools</i> . The study compared the outcomes of ninth graders who entered <i>Talent Development High Schools</i> in the three years immediately after the program was implemented with those of ninth graders from these schools in the three years just before program implementation and with the outcome differences over the same time period for the matched comparison schools. ³
	Many students selected for <i>Talent Development High Schools</i> had low test scores and were overage for their grade. More than three-quarters were African-American and about one in six were Hispanic. Poor attendance was common, with two-thirds missing at least 20% of scheduled school days during their ninth-grade year. In addition, many did not make regular progress toward graduation, with just half promoted to tenth grade at the end of their ninth-grade year. Students in the matched comparison schools were generally similar to <i>Talent Development High Schools</i> students on these characteristics (Kemple & Herlihy, 2004).
	The study examined three cohorts of students. Cohort 1 included students in the intervention and matched comparison schools who enrolled in the ninth grade during the first year of <i>Talent Development High Schools</i> implementation at the intervention schools. Similarly, Cohort 2 and Cohort 3 included students who were enrolled in the ninth grade during the second and third years of implementation, respectively. Given the fixed period for data collection, later cohorts had shorter follow-up periods. To ensure both an adequate follow-up and an adequate sample size for assessing program effectiveness, the WWC used second-year results based on Cohorts 1 and 2 to rate the effectiveness of <i>Talent Development High Schools</i> . Longer-term results based only on Cohort 1 and shorter-term results based on all three cohorts are reported in Appendix A4.
Setting	The impact study was conducted in 11 nonselective public high schools in Philadelphia.
Intervention	The Philadelphia public school district implemented the <i>Talent Development High Schools</i> model in seven high schools. The district began to roll out the program in 1998, with one or two high schools launching <i>Talent Development High Schools</i> each year over a five-year period. School administrators volunteered their schools as candidates for implementing the new program. To allow for adequate follow-up, the impact study excluded the two Philadelphia high schools that implemented <i>Talent Development High Schools</i> last.
	All the Philadelphia <i>Talent Development High Schools</i> created ninth-grade academies on a separate floor or wing of the building, which were taught by teams of four to five teachers. Each school introduced block scheduling with 80- to 90-minute class sessions, introducing "double dose" math and English courses for ninth and tenth graders. These double sections of English and math allowed students to both prepare for and take college preparatory classes over the course of one academic year. Six of the seven schools offered "Twilight School" for new or repeating ninth graders with serious attendance or discipline problems. ⁴
	The model for students in grades 10 through 12 centered around career academies, in which students were divided into smaller "learning communities" around a broad career interest and the curriculum was organized around a career theme. Many Philadelphia high schools already had career academies before <i>Talent Development High Schools</i> was implemented, including many non- <i>Talent Development</i> schools. The study authors concluded that "(i)t is likely, therefore, that the upper-grade experience of students in <i>Talent Development</i> schools did not greatly differ from that of students in non- <i>Talent Development</i> schools" (Kemple, Herlihy, & Smith, 2005, p. 27).
	The study authors reported some variation in how the program was implemented across schools (Kemple, Herlihy, & Smith, 2005). In particular, they noted considerable variation across the intervention schools in the amount of technical assistance and support schools received from the intervention developer, as well as the amount of intervention-specific training school staff received.
	(continued)

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Appendix A2 Outcome measures in the progressing in school domain

Outcome measure	Description
Total credits earned by end of second year of high school	This measure represents the cumulative number of course credits earned over the first two years of high school. These data were collected from individual students' school records obtained from the district.
Enrolled in tenth grade by end of second year of high school	This measure represents the percentage of students who were enrolled in the tenth grade by the end of the second year of high school. These data were collected from individual students' school records obtained from the district.

Appendix A5 Talent Development High Schools rating for the progressing in school domain

The WWC rates an intervention's effects in a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative. For the outcome domain of progressing in school, the WWC rated *Talent Development High Schools* as having potentially positive effects. It did not meet the criteria for positive effects because there was only one study and that study did not meet WWC evidence standards for a strong design. The remaining ratings (mixed effects, no discernible effects, potentially negative effects, and negative effects) were not considered because *Talent Development High Schools* was assigned the highest applicable rating.

Rating received

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

Criterion 1: At least one study showing a statistically significant or substantively important positive effect.

Met. One study of Talent Development High Schools demonstrated a statistically significant positive effect.

AND

• Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

Met. No studies found statistically significant or substantively important negative effects in this domain.

Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

• Criterion 1: Two or more studies showing statistically significant positive effects, at least one of which met WWC evidence standards for a strong design.

Not met. Talent Development High Schools had only one study meeting WWC evidence standards.

AND

• Criterion 2: No studies showing statistically significant or substantively important *negative* effects.

Met. No studies found statistically significant or substantively important negative effects in this domain.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. See the www.negative effects. See the www.negative effects. See the <a href="https://www.negative.negat

Appendix A6 Extent of evidence by domain

	Sample size			
Outcome domain	Number of studies	Schools	Students	Extent of evidence ¹
Staying in school	0	0	0	na
Progressing in school	1	11	nr	Small
Completing school	0	0	0	na

na = not applicable/not studied
nr = not reported

^{1.} A rating of "moderate to large" requires at least two studies and two schools across studies in one domain, and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the rating is "small."